(19) World Intellectual Property **Organization**

International Bureau

14 July 2005 (14.07.2005)



(43) International Publication Date

PCT

(10) International Publication Number WO 2005/063185 A1

(51) International Patent Classification⁷:

A61K 7/16

- (21) International Application Number:

PCT/US2004/043097

(22) International Filing Date:

17 December 2004 (17.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/530,965

19 December 2003 (19.12.2003) US

- (71) Applicants (for all designated States except US): NO-VAMIN TECHNOLOGY INC. [US/US]; 13709 Progress Boulevard, #23, Alachua, FL 32615 (US). UNIVERSITY OF MARYLAND, BALTIMORE [US/US]; 520 West Lombard Street, Baltimore, MD 21201 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GREENSPAN, David, C. [US/US]; 3116 NW 62nd Terrace, Gainesville, FL 32606 (US). LATORRE, Guy [US/US]; 4416 NW 60th Terrace, Gainesville, FL 32606 (US). LITKOWSKI, Leonard, J. [US/US]; 621 Sussex Road, Baltimore, MD 21286 (US). HACK, Gary, D. [US/US]; 8908 Skyrock Court, Columbia, MD 21046 (US).

- (74) Agent: GRANT, Mary, B.; Hutchison & Mason PLLC, P.O. Box 31686, Raleigh, NC 27612 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITIONS AND METHODS FOR PREVENTING OR REDUCING PLAQUE AND/OR GINGIVITIS USING A BIOACTIVE GLASS CONTAINING DENTIFRICE

(57) Abstract: Methods and compositions for the prevention and/or reduction of plaque, plaque build-up and/or gingivitis are provided. Bioactive glass compositions are provided which prevent or reduce plaque, plaque build-up and/or gingivitis through the use of low levels of small bioactive glass particles in amounts from about 0.25 to about 10% by weight in non-aqueous formulations. The resulting non-aqueous compositions are effective in dentifrice products and are stable and pass ISO (International Organization for Standardization) standards. Moreover, these bioactive glass containing non-aqueous compositions have unexpectedly high levels of antimicrobial activity against oral pathogens.

